

Supplementary Table 1.

^a Detailed nutritional compositions and ingredients of animal diets

A. Nutritional composition [Calory (%)]

Composition	Diet		
	AIN93M	LDCLD	LDCLD containing 2.0 % v/v ethanol
Protein (%)	15	17	17
Carbohydrate (%)	76	47	33
Fat (%)	9	36	36
Ethanol (%)		0	14
Total	100	100	100

B. Ingredient details

Ingredient	Diet					
	AIN93M		LDCLD		LDCLD containing 2.0 % v/v ethanol	
	g/kg	kcal/kg	g/kg	kcal/kg	g/kg	kcal/kg
Casein	140	560	41.4	166	41.4	166
DL-Methionine	0	0	0.3	1	0.3	1
L-Cystine	1.8	7	0.5	2	0.5	2
Corn Starch	496	1980	0	0	0	0
Maltodextrin	125	500	115	461	80	320
Sucrose	100	400	0	0	0	0
Cellulose	50	0	10	0	10	0
Xanthan Gum	0	0	3	0	3	0
Soybean Oil	40	360	0	0	0	0
Corn Oil	0	0	8.5	77	8.5	77
Olive Oil	0	0	28.4	256	28.4	256
Safflower Oil	0	0	2.7	24	2.7	24
Minerals - Mix	35	0	8.8	0	8.8	0
Vitamins - Mix	10	40	2.5	9	2.5	9
Choline Bitartrate	2.5	0	0.5	0	0.5	0
Ethanol 100%	0	0	0	0	20	140
H ₂ O	0	0	778	0	793	0
Total	1000	3850	1000	996	1000	995

^a For acclimation of the mice used (n = 32), AIN93M was used during the first one week and LDCLD during the next one week. During intervention, LDCLD was used for Groups C and S (n = 8 each) and LDCLD containing 2% v/v ethanol was used for Groups E and ES (n = 8 each).

Supplementary Table 2. Primer sequences

Gene (mouse)	Forward 5'→3'	Reverse 5'→3'	GeneBank accession number
TNF- α	ACACTCAGATCATCTTCTCAAAATTCG	GTGTGGGTGAGGAGCACGTAGT	X02611
MCP-1	ATGCAGGTCCTGTCATGCTTC	GGCATCACAGTCCGAGTCACAC	BC145869
IL-6	AACGATGATGCACTTGCAGA	GAGCATTGGAAATTGGGGTA	X54542
β -Actin	CTAAGGCCAACCGTGAAAAG	ACCAGAGGCATACAGGGACA	NM_007393.3

TNF- α , Tumor necrosis factor- α ; MCP-1, Monocyte chemoattractant protein-1; IL-6, Interleukin-6

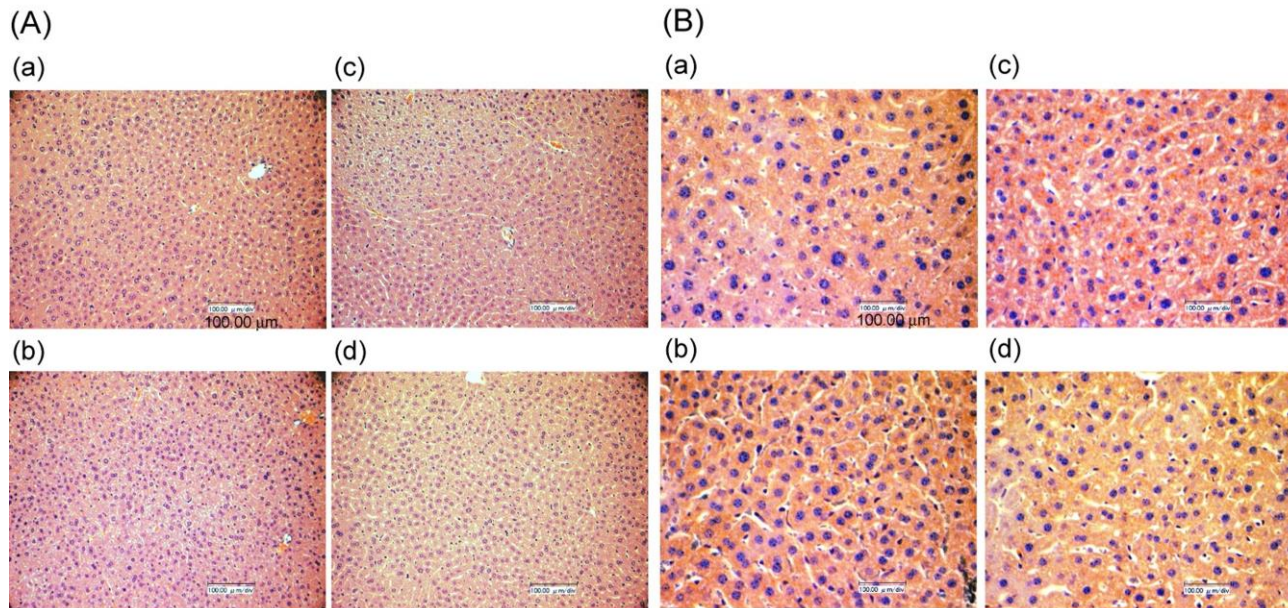
Supplementary Table 3.

Plasma and faecal sesaminol contents of the mice on

Group (N=3/group)	Sesaminol content	
	Plasma ($\mu\text{g/mL-Plasma}$)	Feces ($\mu\text{g/g-feces}$)
	*	*
Group C	*	*
	*	*
Group S	*	49
	*	*
	*	*
Group E	*	*
	*	*
Group ES	*	4.33
	*	1.69
	*	1.98

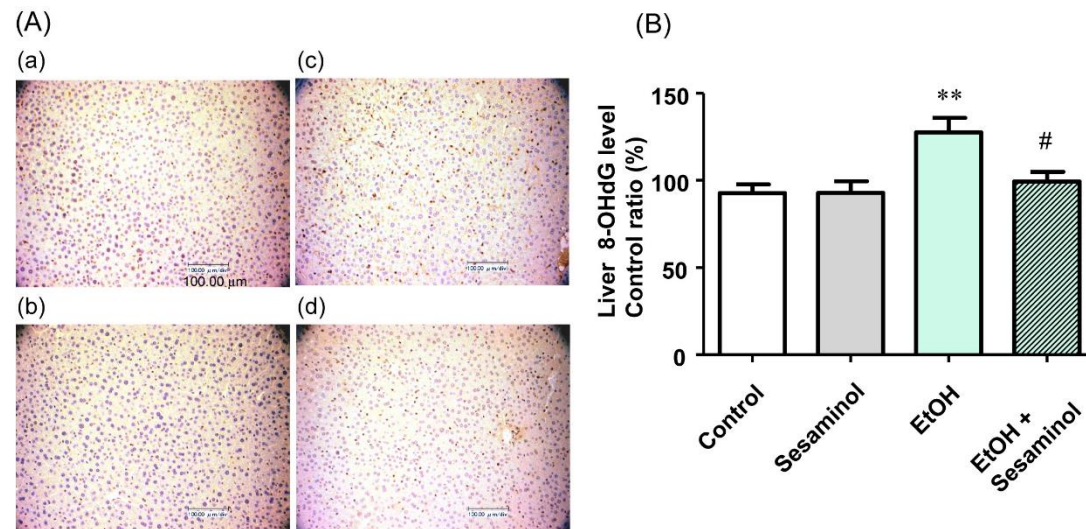
* Below detection limit.

Supplementary Fig. 1 Microscopic observation of HE-stained and Oil red-O stained liver tissues in mice



(A) HE staining of liver section images at 400X magnification, (B) Oil-red O staining of liver sections images at 1,000X magnification shows hepatic triglyceride levels. (a) Group C, (b) Group S, (c) Group E, and (d) Group ES.

Supplementary Fig. 2. Effects of sesaminol on ethanol-induced elevation of 8-OHdG in hepatic cells



(A) Images of the 8-OHdG immunohistochemical staining of liver section at 400X magnification, (a) Group C, (b) Group S, (c) Group E, and (d) Group ES.

(B) The levels of 8-OHdG in the mtDNA of liver cells were determined by ELISA, and the relative percentages of the 8-OHdG levels are shown with the level obtained with a subject of Group C taken to be 100%. The data are expressed as means \pm SD (n = 5).

* $p < 0.05$ versus Group C, † $p < 0.05$ versus Group S, # $p < 0.05$ versus Group E as assessed by ANOVA with the Tukey-Kramer test.